(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 31 March 2005 (31.03.2005)

PCT

(10) International Publication Number WO 2005/028577 A2

(51) International Patent Classification7:

C09D 11/00

(21) International Application Number:

PCT/US2004/028603

(22) International Filing Date:

2 September 2004 (02.09.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/500,394

5 September 2003 (05.09.2003) US

- (71) Applicant (for all designated States except US): WILLIAM MARSH RICE UNIVERSITY [US/US]; 6100 Main Street, Houston, TX 77005 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): WEISMAN, R., Bruce [US/US]; 4132 Albans Dr., Houston, TX 77005 (US). BACHILO, Sergei, M. [US/US]; 9214 Symphonic Ln., Houston, TX 77040 (US). BOOTH, Eric, Christopher [US/US]; 3501 10 Ave., No. 124, Moorhead, MN 56560 (US).

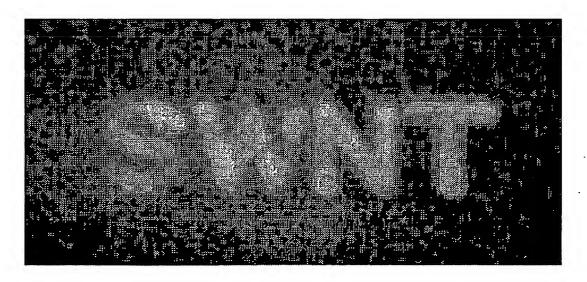
- (74) Agents: GARSSON, Ross, Spencer et al.; Winstead Sechrest & Minick P.C., P.O. Box 50784, Dallas, TX 75201-0784 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

 without international search report and to be republished upon receipt of that report

[Continued on next page]

(54) Title: FLUORESCENT SECURITY INKS AND MARKERS COMPRISING CARBON NANOTUBES



(57) Abstract: The present invention is directed toward fluorescent inks and markers comprising carbon nanotubes. The present invention is also directed toward methods of making such inks and markers and to methods of using such inks and markers, especially for security applications (e.g., anti-counterfeiting). Such inks and markers rely on the unique fluorescent properties of semiconducting carbon nanotubes.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.